

Appl. No. 10/005,396
Reply to Office Action of November 18, 2005

Attorney Docket No. 29484.30
Customer No. 27683

REMARKS

Claims 40-47, 73-77 and 85-89 are currently pending in the application. In view of the remarks that follow, Applicants respectfully request reconsideration of this application.

Discussion of Frailong U.S. Patent No. 6,496,858

All of the pending claims have been rejected as unpatentable in view of Frailong U.S. Patent No. 6,496,858, considered by itself or in combination with other references. It is believed that a brief discussion of Frailong may be helpful.

Persons skilled in the art are well aware that a typical network or ISP environment has a plurality of network devices, including a plurality of gateway interface devices. The Frailong patent relates to this type of known network. For example, Figure 2 of Frailong shows the Internet at the top of the figure, and at 208 shows one of the many gateway interface devices that are in fact coupled to the Internet. As discussed in lines 34-36 of column 7, Figure 4 is a diagram representing software 400 that is executed within each gateway interface device 208, and this software 400 includes a runtime layer 406. This runtime layer 406 is also shown in Figure 5, and Figure 5 very clearly shows that the runtime layer 406 includes a configuration manager 506 and a data store 508. Figure 5 also shows a remote server 504 and, in the text beginning in line 6 of column 10, Frailong explains that the remote server 504 performs centralized collection of various attributes/parameters, such as information about the deployment environment.

The approach disclosed in Frailong is commonly referred to in the art as a provisioning system. In a provisioning system, attributes/parameters about a customer/client and a deployment environment are collected in a system/server that will later utilize the attributes for a provisioning operation. In Frailong, for example, the process of collection of attributes/parameters by the remote server 504 is described in detail in lines 24-40 of column 5. In addition, Figures 9A and 9B of Frailong depict the process where customer information is collected and stored in the remote server 504. Eventually, at least some of this information is

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transmitted to at least one of the interface devices, such as the configuration manager 506 in the gateway interface device 208. The fact that a full configuration file may be transmitted from the remote server 504 to the gateway interface device 208 is irrelevant to the role of the remote server 504.

In Frailong, once the remote server 504 has collected attributes and then transmitted at least some of this collected information to the configuration manager 506 in the gateway interface device 208, the remote server 504 has no further interaction with the gateway device 208 (except where a source other than the device 208 provides the remote server 504 with a request for an upgrade or service change for the device 208). This is because all configuration management functions are the responsibility of the configuration manager 506 in the runtime layer 406 of the gateway interface device 208 (as opposed to being the responsibility of the remote server 504). The configuration manager 506 does not send configuration information back to the remote server 504. This is very clear from Figures 3-5 of Frailong, and from the text running from line 65 of column 5 through line 8 of column 12. With reference to the text that begins in line 34 of column 7, Frailong describes the role of the software executed in the runtime layer 406 of the gateway interface device 208, and provides examples that very clearly show the configuration manager 506 is part of the gateway interface device 406, and not part of the remote server 504. Frailong is quite clear and specific in explaining that the system software relating to configuration management is executed in the gateway interface device (for example in the text beginning in line 45 of column 7). Frailong is equally clear and specific that the configuration manager 506 is part of the runtime layer 406 disclosed in Figures 4 and 5. Moreover, Frailong explains very clearly that the data store 508 exists logically in the runtime layer 406 of the gateway interface device 208, and exists physically in the hardware of the gateway interface device 208. For example, see Figure 3 and lines 50-55 in column 10. Thus, the Frailong patent clearly teaches a one-to-one correspondence between configuration management and each gateway interface device 208. Accordingly, there may be centralized collection of certain attributes in Frailong, but the actual configuration management is carried out in the gateway

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devices 208. Configuration management is thus distributed rather than centralized.

It should be noted that, in Figure 5 of Frailong, the line from the remote server 504 to the configuration manager 506 has an arrowhead at only one end, in order to represent the unidirectional flow of attributes from the remote server 504 to the configuration manager 506 within the gateway interface device 208. Similarly, Figures 9A and 9B clearly teach a unidirectional flow of collected attributes from the remote server 504 to the configuration manager 506 of the gateway interface device 208.

With reference to Figures 6-7, and the text running from line 1 of column 9 to line 2 of column 10, Frailong discusses some configuration change operations that occur within the gateway interface device 208 and that are accomplished without any notification to or involvement of the remote server 504. All configuration management and rollback functions are localized to the system software of the gateway interface device 208. This clearly demonstrates that the configuration manager 506 of the gateway interface device 208 maintains in its data store 508 the database of record for the configuration of the gateway interface device 208.

To the extent that the remote server 504 does happen to have some attribute information, lines 3-16 in column 10 very clearly explain that this information is limited to "configuration information provided by the user which is related to the user's local area network environment, service requirements, domain names, and so on".

Independent Claim 40

Independent Claim 40 stands rejected under 35 U.S.C. §102 as anticipated by Frailong U.S. Patent No. 6,496,858. This ground of rejection is respectfully traversed, for the following reasons. The PTO specifies in MPEP §2131 that, in order for a reference to anticipate a claim under §102, the reference must teach each and every element recited in the claim. Claim 40 recites:

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A control server to manage a plurality of device configurations comprising:

a data store to store current status of each device;

a user interface to alter data in the data store to prompt creation of a job;

a scheduler to schedule jobs to update devices;

a control point interface to send jobs to a control point, and to receive a result from the control point.

In the Office Action, the rejection of Claim 40 appears in lines 1-8 on page 10. In particular, the Office Action notes that Frailong discloses a server 206 (Figure 2), and then asserts that the server 206 includes a data store 508, a user interface 502, and a scheduler 404 (Figure 4).

Applicants respectfully disagree. Figure 2 of Frailong depicts the remote server 206, and also a gateway interface device 208. As evident from the foregoing discussion of Frailong, and contrary to the assertions in the Office Action, the data store 508 and the scheduler 404 are not portions of the server 206, but instead are portions of the gateway interface device 208.

Frailong's general approach to network device management is de-centralized, in that each device (such as the gateway interface device 208) basically handles its own configuration management. As discussed above, some attributes are collected centrally and are then supplied to network devices. However, the actual configuration management is then performed in the network devices themselves, and not centrally. The Office Action attempts to blur the distinction between collection of attributes and actual configuration management, but these activities are actually very distinct, and Frailong does not do centralized configuration management. Frailong's approach to configuration is de-centralized, and requires that each device must have specialized configuration management capability built into the device itself. In contrast, the configuration approach of the present application will work with virtually any commercially available device,

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and in fact can work with pre-existing devices without any need for changes to the hardware of those devices. Accordingly, Frailong clearly fails to disclose a "control server to manage a plurality of device configurations", much less such a control server that has "a data store to store current status of each device". Frailong therefore fails to teach each and every element recited in Claim 40, and thus does not anticipate Claim 40 under §102.

In reply to arguments that Applicants presented in their last Response, the Examiner offers comments regarding those arguments on pages 2-4 of the Office Action. As one example, in lines 14-17 on page 3, the Examiner states that Claim 40 is "interpreted" to read as follows:

[A] control server computer system and method of
managing a plurality of device configurations, comprising
a data store,
a user interface,
a job scheduler, and
a control point.

Applicants respectfully submit that this is not merely "interpretation" of Claim 40. Instead, what the Examiner has done is to throw away Applicants' Claim 40, and replace it with a different claim for purposes of examination. For example, Applicants' Claim 40 includes limitations such as a recitation that the data store operates "to store current status of each device", but this particular limitation does not appear anywhere in the Examiner's substitute claim. Applicants respectfully submit that this approach is highly improper. The Examiner asserts that every word of the substitute claim is anticipated by Frailong. However, that is not the issue. The issue is whether every word of Applicants' Claim 40 is anticipated by Frailong. As discussed above, this is not the case. For example, Applicants' Claim 40 recites a plurality of device configurations, and then recites "a data store to store current status of each device". Frailong discloses in Figure 5 a data store 308 that stores a configuration for one device (the gateway interface device

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208), but Frailong's data store 508 does not store configuration information for each of a plurality of devices. Moreover, Figure 5 of Frailong discloses a configuration manager 506 that manages the configuration for only one device (the gateway interface device 208). Frailong's configuration manager 506 does not "manage a plurality of device configurations" as recited in Applicants' Claim 40. Thus, since Frailong does not disclose each and every element recited in Applicants' Claim 40, Frailong does not anticipate Claim 40 under §102. The Examiner cannot avoid that defect in Frailong by discarding the language of Applicants' Claim 40 in favor of a substitute claim that was drafted by the Examiner and that differs from Applicants' Claim 40.

In the middle of page 4 of the Office Action, the Examiner makes the assertion that:

... Applicant also argues that Frailong's general approach to network management is "de-centralized". . . . [But] this is simply not the case. Contrary to Applicant's assertion , Frailong makes it clear that the control server of his invention is in fact "centralized".

Applicants respectfully disagree. As evident from the discussion of Frailong above, Frailong may do some central collection of attributes, but each of the devices in Frailong is entirely responsible for managing its own configuration, and these devices do not return any of their configuration information back to any central control unit, nor does Frailong have any data store that contains configuration information for each of several devices.

Summarizing, it is respectfully submitted that Frailong does not disclose each and every element recited in Claim 40, and therefore does not anticipate Claim 40 under §102. Claim 40 is thus believed to be allowable over Frailong, and notice to that effect is respectfully requested.

Independent Claim 73

Independent Claim 73 stands rejected under 35 U.S.C. §102 as anticipated by the Frailong patent. This ground of rejection is respectfully traversed, for the following reasons. As noted

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above, the PTO specifies in MPEP §2131 that, in order for a reference to anticipate a claim under §102, the reference must teach each and every element recited in the claim. Claim 73 expressly recites:

A method of controlling a network using a control server,
the method comprising:

 maintaining a data store including configurations of each
 device coupled to the control server through a control point;

 generating a job to update a device;

 receiving a report from the control point regarding the
 execution of the job to update the device; and

 storing in the data store the report with the current
 configuration of the device, such that a complete revision history of
 the device is maintained.

Where a §102 rejection is based on a complex reference, 37 C.F.R. §1.104(c)(2) requires that the Office Action clearly identify the particular portions of the reference that supposedly correspond to the subject matter of the claim. The remarks section of Applicants' last Response pointed out that, in the prior Office Action, the rejection of Claim 73 failed to meet this requirement. In the present Office Action, the rejection of Claim 73 appears at lines 6-15 on page 11, and is a verbatim copy of the defective rejection from the prior Office Action. This text on page 11 makes no attempt to bring the rejection into compliance with the requirements of §104(c)(2). For example, the rejection still fails to clearly identify which components of Frailong are believed by the Examiner to correspond to the "control server" and the "control point" that are recited in Claim 73.

In reply to arguments that Applicants presented in their last Response, the Examiner

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offers comments about those arguments on pages 4-6 of the Office Action. As one example, in lines 6-7 on page 6, the Examiner asserts that:

... [Frailong's] data store 508 contains and maintains configuration information for the gateway interface device as well as the client computer network.

However, as evident from the discussion of Frailong above, each of the devices in Frailong is entirely responsible for handling its own configuration. These devices do not return any of their configuration information back to any central control unit, and do not maintain configuration information for other devices.

In lines 7-10 on page 5 of the Office Action, the Examiner asserts that:

... it has been shown based on the above discussion for claim 40 that the Frailong prior art sufficiently meets the limitations of claim 40. Therefore, the limitations of claim 73 are also met since the elements of both claims have been treated in the same manner.

In other words, the Examiner is saying that Applicants' Claim 73 has been replaced with the same substitute claim that the Examiner drafted and substituted for Applicants' Claim 40. However, for the same basic reasons discussed above in association with Claim 40, it is highly improper for the Examiner to carry out examination using a substitute claim prepared by the Examiner, instead of the claim actually submitted by Applicants. Further, the rejection of Claim 73 suffers from the same defect as the rejection of Claim 40, in that it treats elements such as the data store 508 as if they were components of the server 206, when in fact they are actually components of the gateway interface device 208. Moreover, the Office Action asserts that the data store 508 contains "configurations of each device coupled to the control server through a control point".

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But in Frailong, the data store 508 of the device 208 contains only information relating to that particular device 208, and not any other devices.

As explained above, MPEP §2131 specifies that, in order for Frailong to anticipate Claim 73 under §102, Frailong must disclose each and every element recited in Claim 73. In view of the foregoing discussion, it is respectfully submitted that Frailong does not disclose each and every element recited in Claim 73, and thus does not anticipate Claim 73 under §102. Claim 73 is therefore believed to be allowable over Frailong, and notice to that effect is respectfully requested.

Independent Claim 85

Independent Claim 85 stands rejected under 35 U.S.C. §102 as anticipated by the Frailong patent. This ground of rejection is respectfully traversed, for the following reasons. As noted above, the PTO specifies in MPEP §2131 that, in order for a reference to anticipate a claim under §102, the reference must teach each and every element recited in the claim. Claim 85 expressly recites:

A method of remotely manipulating a device coupled to a control point, the control point managed by a control server, comprising:

generating a job to manipulate the device;

sending the job to the control point to which the device is coupled; and

providing an execution engine to execute the job on the control point.

As noted earlier, when a §102 rejection is based on a complex reference, 37 C.F.R. §1.104(c)(2)

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requires that the Office Action clearly identify the particular portions of the reference that supposedly correspond to the subject matter of the claim. The remarks section of Applicants' last Response pointed out that, in the prior Office Action, the rejection of Claim 85 failed to meet this requirement. In the present Office Action, the rejection of Claim 85 appears at lines 10-16 on page 12, and is a verbatim copy of the defective rejection from the prior Office Action. This text on page 12 makes no attempt to bring the rejection into compliance with the requirements of §104(c)(2). For example, the rejection still fails to clearly identify which components of Frailong are believed by the Examiner to correspond to the "control server", the "control point" and the "device" recited in Claim 85.

In reply to arguments that Applicants presented in their last Response, the Examiner offers comments about those arguments on pages 6-8 of the Office Action. As one example, in the text running from line 8 on page 7 through line 17 on page 9, the Office Action discusses Claim 85 with reference to various different portions of Frailong, including references to "col 15, line 30 - col 16, line 19", "Fig. 11", and "col 16, line 53 - col 17, line 24". However, the §102 rejection is not based on these portions of Frailong. Instead, with reference to lines 10-16 on page 12 of the present Office Action, the rejection of Claim 85 is based on entirely different portions of Frailong, namely Figures 4, 6 and 7, lines 1-20 of column 9, and lines 1-21 of column 15.

In lines 7-10 on page 5 of the Office Action, the Examiner asserts that:

... it has been shown based on the above discussion for claim 40 that the Frailong prior art sufficiently meets the limitations of claim 40. Therefore, the limitations of claim 85 are also met for at least this reason since the elements of both claims have been treated in the same manner.

In other words, the Examiner is saying that Applicants' Claim 85 has been replaced with the same

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substitute claim that the Examiner drafted and substituted for Applicants' Claim 40. However, for the same basic reasons discussed above in association with Claim 40, it is highly improper for the Examiner to carry out examination using a substitute claim prepared by the Examiner, instead of the claim actually submitted by Applicants. Further, the rejection of Claim 85 suffers from the same defect as the rejection of Claim 40, in that it treats elements such as the data store 508 as if they were components of the server 206, when in fact they are actually components of the gateway interface device 208.

As explained above, MPEP §2131 specifies that, in order for Frailong to anticipate Claim 85 under §102, Frailong must disclose each and every element recited in Claim 85. In view of the foregoing discussion, it is respectfully submitted that Frailong does not disclose each and every element recited in Claim 85, and thus does not anticipate Claim 85 under §102. Claim 85 is therefore believed to be allowable over Frailong, and notice to that effect is respectfully requested.

Dependent Claims

Claims 41-47 and 87, Claims 74-77 and 88, and Claims 86 and 89 respectively depend from Claim 40, Claim 73 and Claim 85, and are also believed to be distinct from the art of record, for example for the same reasons discussed above with respect to Claims 40, 73 and 85, respectively.

Conclusion

Based on the foregoing, it is respectfully submitted that all of the pending claims are fully allowable, and favorable reconsideration of this application is therefore respectfully requested. If the Examiner believes that examination of the present application may be advanced in any way by a telephone conference, the Examiner is invited to telephone the undersigned attorney at 972-739-8647.

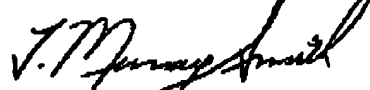
Although Applicants believe that no fee is due in association with the filing of this

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Response, the Commissioner is hereby authorized to charge any additional fee required by this paper, or to credit any overpayment, to Deposit Account No. 08-1394 of Haynes and Boone LLP.

Respectfully submitted,



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